DOCUMENT RESUME

ED 329 808 CE 057 824

AUTHOR Lankard, Bettina A.
TITLE Tech Prep. ERIC Digest No. 108.
INSTITUTION ERIC Clearinghouse on Adult, Career, and Vocational Education, Columbus, Ohio.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
REPORT NO EDO-CE-91-108
PUB DATE 91
CONTRACT RI88062005
NOTE 3p.
PUB TYPE Information Analyses - ERIC Clearinghouse Products (071)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Articulation (Education); *Coordination; Curriculum Development; *Institutional Cooperation; Postsecondary Education; Secondary Education; Technical Education; *Technological Advancement; *Technology; *Vocational Education
IDENTIFIERS ERIC Digests; *Tech Prep

ABSTRACT

Tech prep is an articulation partnership between secondary vocational-technical schools and postsecondary institutions. It can be described as an "advanced skills" articulation model because it enables students to use the time saved through coordinated course work to acquire the more advanced occupational knowledge and skill required by changing technologies. Tech prep is becoming highly visible in vocational-technical education for a variety of reasons: the change to a service economy, new technology, and changing work force demographics. Articulation through tech prep offers a more efficient use of tax dollars for education and training, eliminates unnecessary duplication of program content, and includes, as critical to education, the technological content knowledge and skill training required by today's employers. Factors have been identified that influence the success of tech-prep articulation efforts. The factors affecting students are counseling, orientation, mentorship, and automatic admission to postsecondary institutions. Faculty leadership is also critical to tech-prep articulation. Some strategies for strengthening tech prep include establishing lines of communication, identifying programs to be coordinated, rewriting curricular competencies, developing a model, designing an evaluation model, providing technical assistance, and conducting a public relations effort. (7 references) (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED329808

ERIC Clearinghouse on Adult, Career, and Vocational Education

DIGEST NO. 108

Tech Prep

by Bettina A. Lankard

1991

EDO-CE-91-108

Tech prep, an articulation partnership between secondary vocational-technical schools and postsecondary institutions, is a model developed to help people prepare for careers in today's society--careers that demand a technical knowledge unheard of 25 years ago. It is an articulation effort that involves the coordination of curricula across two or more institutions to ensure that graduates possess the prerequisite knowledge and skill required for employment in a chosen occupation. Tech prep can be described as an "advanced skills" articulation model because it enables students to use the time saved through coordinated course work to acquire the more advanced occupational knowledge and skill required by changing technologies (Robertson-Smith 1990).

The new Carl Perkins Act Amendments made available to the Education Department $63.4 million to distribute to the states for tech prep programs. These funds will make it possible for tech prep programs to be more competitive with college prep programs and to respond more directly to industry's real skill needs (Mensel 1991).

Tech Prep and the Changing Work Force

There are a variety of reasons why tech prep is becoming highly visible in vocational-technical education. Economic, technological, demographic, and educational patterns all influence the need for technical preparation for the work force. During recent years, the United States has moved from a primarily goods-producing economy to a service economy. Skills in communication, decision making, and problem solving are in greater demand as workers have more cause for interaction with customers, the community, and other workers.

New technology is creating a demand for workers who have increased computation, communication, and science skills, making continual upgrading necessary. According to the U.S. Department of Labor, the fastest growing segment of the job market in the 1990s will be low- to midlevel occupations, with three out of four of those jobs requiring some education or technical training beyond the high school level (Scott 1991).

The demographics of the work force are also changing. There are more women, minorities, and disadvantaged students entering the workplace. Relevant education and training in high school will enable them to move with ease to advanced training in postsecondary institutions. About 30 percent of community colleges' enrollment is made up of minority students (Watkins 1989). Streamlining the transfer process, eliminating unnecessary duplication of program content, and ensuring continuity in education and training can increase the achievement of minority students.

Articulation through Tech Prep

Parnell (1985) proposes linking secondary and postsecondary curricula as a way of adding structure and direction to educational programs that serve high school students, whether they be in college prep or vocational tracks. Most tech prep programs operate on a "2 + 2" basis--2 years of high school and 2 years of college. In the "2 + 2" programs, secondary students who have an interest in technical programs are placed in high school programs that prepare them for more advanced training in community college. However, some programs, like the Pee Dee Tech Prep Program of Richmond County Schools and Richmond Community College in North Carolina, feature 4 years of high school instead of 2. The Pee Dee Program "emphasizes advanced communications, mathematical, scientific and technological knowledge and skill development coupled with appropriate hands-on experiences" (Scott 1991, p. 23).

Articulation through tech prep offers a more efficient use of tax dollars for education and training. It eliminates unnecessary duplication of program content and includes as critical to education the technological content knowledge and skill training required by today's employers. For business and industry, successful tech prep programs have implications for regional and national competitiveness. "In states where workers lack high school credentials and essential work skills, where large numbers of high school students opt out of further education and where employers are asking for better qualified technical workers, tech prep has the potential to revolutionize occupational preparation" (Scott 1991, p. 63).

Strategies for Success

Robertson-Smith (1990) identifies several factors influencing the success of tech-prep articulation efforts. The factors affecting students are counseling, orientation, mentorship, and automatic admission to postsecondary institutions.

Students who enroll in a secondary technical or vocational-technical school should receive information about the tech-prep program upon admission. They should receive an outline of the course requirements in their occupational area, the grade point average they will need to maintain for good standing in the program, the occupational programs available at various postsecondary institutions, and financial aid information.

Orientation facilitates the successful transfer of students from secondary to postsecondary education. Negotiation through the complex transfer process can be eased by orienting students to postsecondary facilities while they are still in secondary school. Involving parents--through tours, counseling sessions, and so forth--can also encourage support for the program and facilitate student transfer.

Mentorship is one way of helping students learn about the postsecondary programs to which they will transfer. Once enrolled, students may be linked with students who have preceded them in the articulated tech-prep program at the postsecondary institution and through that linkage become familiar with the programs, students, and faculty academic program advisors.

Upon graduation from the secondary vocational-technical school, admission to the postsecondary institution should be automatic for students who have completed the established and

CE 057 234

BEST COPY AVAILABLE

articulated requirements. Making this transition free of difficulties will contribute to students' feeling of identity with the community college.

Faculty leadership is also critical to tech-prep articulation. Cooperative arrangements are best achieved when there has been good communication between faculty members from each partnership institution. Faculty from secondary and postsecondary institutions should review such issues as "equipment purchase and upgrading, the use of computer software, textbook changes, and the purchase of teaching materials" (Robertson-Smith 1990, p. 9). Faculty members from each school should participate in evaluation of student competencies at all levels; counselors should participate in student recruitment and monitor progress. Ideally, "postsecondary faculty members see the overall tech prep program as an asset to their individual occupational programs and as a means of filling their upper-level courses with qualified students; secondary faculty members see the tech-prep program as a mean of helping their students move into the work force either at a more rapid pace or at a more advanced level" (ibid., p. 10).

McKinney et al. (1988) uncovered similar factors influencing success in tech prep articulation efforts. Some of the key issues they identified were program improvement, increased services to students, the assignment of a high priority to articulation by state officials and local administrators, open communication channels, effective interpersonal relationships, and well-planned and well-written articulation agreements. Such agreements highlight the common core of academic and technical skills needed for program completion.

Several strategies for addressing such issues and strengthening tech prep were adopted by the Delaware Consortium on Technical Preparation Programs (1989):

- Establish lines of communication between participating secondary and postsecondary institutions involved in the articulation process
- Identify which secondary and postsecondary institutional programs can be easily coordinated for transition
- Rewrite or expand curricular competencies in those instructional programs identified for articulation
- Cooperatively design guidance forms, test forms, and course competency checklists for participating students
- Publish a quarterly newsletter about articulation and tech prep efforts
- Develop a functional operational model to solicit the involvement of business and industry
- Design an evaluation model to track program and student success
- Provide technical assistance to cooperating instructors for curriculum development
- Conduct a public relations effort to enhance student and public awareness of the program

Conclusion

Many noteworthy articulation arrangements and programs are in operation (or in the initiation phase) at high schools and community colleges across the country. These programs typically give attention to problems of underprepared students, duplication of effort, and limited budget resources. They require coordination and collaboration between faculty at participating institutions to address curricular planning, textbooks, equipment, course content, and facility sharing. In most instances, the tech prep programs involve business and industry, either in an advisory capacity or in a training capacity.

The demand for tech prep reflects needs generated by the changing economic, technological, demographic, and educational patterns of today's society and work force. Linking secondary and postsecondary curricula to prepare youth for work is a goal of tech prep efforts. Through such articulation, tax dollars are used more efficiently for education and training, avoiding duplication of programs and enhancing occupational preparation. Successful articulation efforts support student counseling, orientation, mentorship, automatic admission to postsecondary institutions, and faculty preservice and inservice training critical to tech prep articulation.

REFERENCES

Delaware Consortium on Technical Preparation Programs. *Tech Prep Compendium of Models*. Dover: Delaware Statewide Vocational-Technical High Schools and Delaware Technical and Community Colleges, 1989. (ED 319 927).

McKinney, F. L.; Fields, E. L.; Kurth, P.; and Kelly, F. E. *Factors Influencing the Success of Secondary/Postsecondary Vocational-Technical Education Articulation Programs*. Columbus: The National Center for Research in Vocational Education, The Ohio State University, 1988. (ED 289 053).

Mensel, F. "Tech-Prep Funding: The 'Ford to Harkin to Hatfield to Natcher and Conte' Miracle." *Community, Technical and Junior College Times* 3, no. 1 (January 1, 1991): 9.

Parnell, D. *The Neglected Majority*. Washington, DC: American Association of Community and Junior Colleges, 1985. (ED 262 843).

Robertson-Smith, M. *Articulation Models for Vocational Education. Information Series No. 343*. Columbus: ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, The Ohio State University, 1990.

Scott, R. W. "Making the Case for Tech Prep." *Vocational Education Journal* 66, no. 2 (February 1991): 22-23, 63.

Watkins, B. T. "2-Year Institutions under Pressure to Ease Transfers." *Chronicle of Higher Education* 36, no. 9 (November 1, 1989): A35, 38.

Developed with funding from the Office of Educational Research and Improvement, U.S. Department of Education, under Contract No. RI88062005. The opinions expressed do not necessarily reflect the opinions or policies of OERI or the Department. *Digests* may be freely reproduced.

CENTER ON EDUCATION AND TRAINING FOR EMPLOYMENT
THE OHIO STATE UNIVERSITY
1900 KENNY ROAD • COLUMBUS, OHIO 43210
Telephone: (614) 292-4353 or (800) 848-4815